

AMENDMENTS TO THE SPECIFICATION

Please replace previously presented Paragraph [0012] with the following paragraph:

[0012] With initial reference to Figure 1, the optically initiated propulsion system according to the present invention is illustrated and generally identified at reference 10. The propulsion system 10, shown operatively disposed in vessel 12, includes an optical source 20 such as a laser for producing laser light. Fiber coupler 50 optically connects optical source 20 with a slurry fuel/oxidizer mixture 90 in combustion chamber 70. An intensity profiler 30 and optical wavelength filter 40 are incorporated between optical source 20 and fiber coupler 50. A fiber to chamber coupler 60 is used to interconnect the fiber coupler 50 with the slurry fuel/oxidizer mixture [[70]] 90. The optical initiation of combustion of the slurry fuel and air mixture yields a mixture of partially dissociated air and chemically cracked fuel 80.

Please replace Paragraph [0019] with the following paragraph:

[0019] Where $[[\rho_{cr}]]$ ρ_{cr} is the critical electron number for breakdown, $[[\tau_p]]$ τ_p is the laser pulsewidth; m, e, c are the electron constants; ω is the optical field frequency; $[[E_I]]$ E_I is the ionization energy of the fuel or oxidizer; τ is the momentum transfer collision time; g is the electron loss rate; and $[[\rho_0]]$ ρ_0 is the "initial" electron density. Although this depends on the particular characteristics of the medium, optical systems can be designed which can deliver this level of intensity into the combustion chamber 70.

Please replace Paragraph [0022] with the following paragraph:

[0022] Turning now to Figure 2, in a first general step 100 the preferred method of the present invention provides an energy source 20. In a second general step 110, a storage combustion chamber 70 containing a slurry fuel/oxidizer mixture 90 is provided. In a third general step 120, a delivery device 50 is provided. In a fourth general step 130, an output is generated from the energy source 20 for interacting with the slurry fuel/oxidizer mixture 90 to create a combustive reaction.